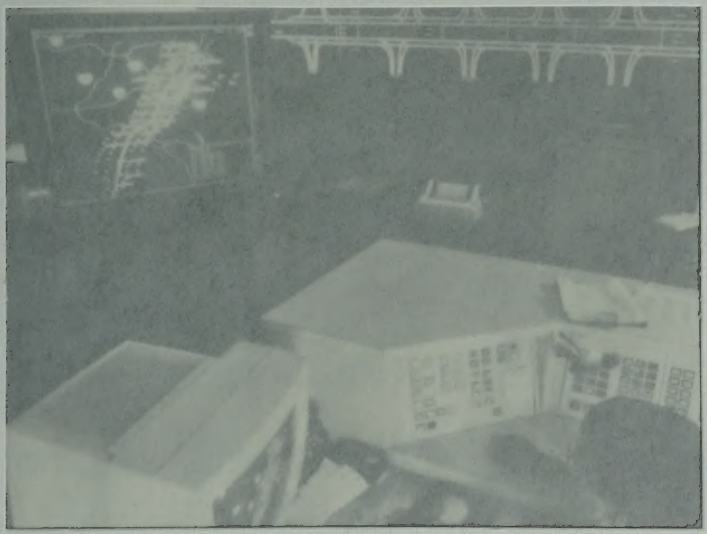

HIGH TECH TRAFFIC MANAGEMENT ON THE NEW JERSEY TURNPIKE

Today's Look Into Tomorrow's Turnpike

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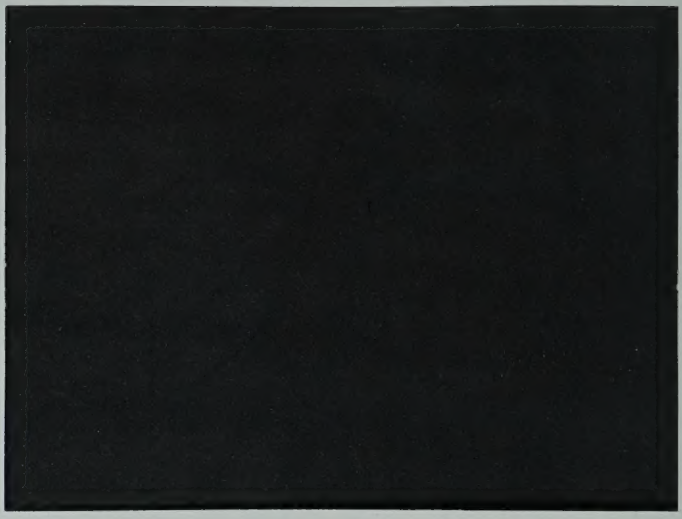

HIGH TECH TRAFFIC MANAGEMENT ON THE NEW JERSEY TURNPIKE

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FRONT PAGE: ***With the touch of a key.*** *Supervisors in the Automatic Traffic Surveillance and Control Center (ATSCS) receive instant updates of traffic conditions from computerized screens.*

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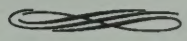

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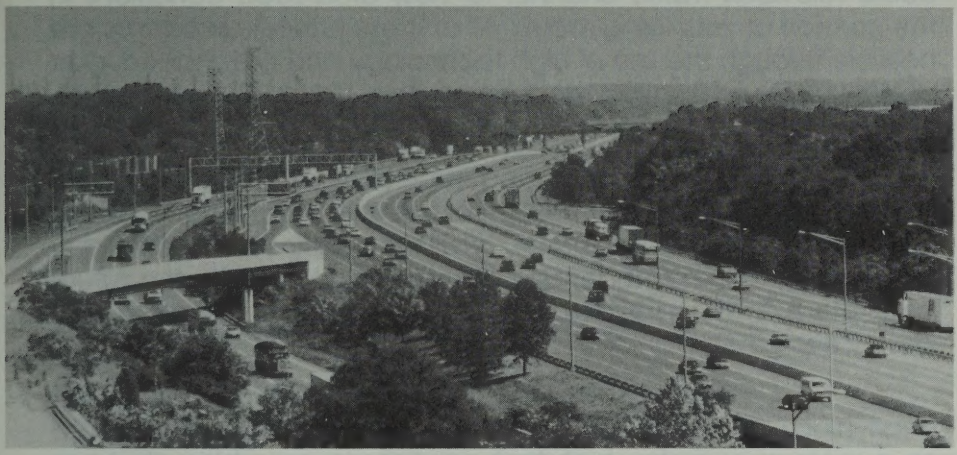


VIEW OF THE DUAL-DUAL ROADWAY *from the Turnpike's Administration Building in New Brunswick where the Automatic Traffic Surveillance and Control Center is located.*

TODAY'S LOOK INTO TOMORROW'S TURNPIKE

Motorists driving into the 21st Century on the New Jersey Turnpike will be traveling on a high-speed, limited access roadway that takes full advantage of the latest technological advances in highway traffic management with a primary emphasis on safety.

Imagine yourself at a Giants or Jets football game at the Meadowlands Sports Complex and visually receiving a traffic report for the New Jersey Turnpike and adjacent roadways on the huge, instant replay screen before you leave for your trip home. Suppose you could view similar large screen displays at strategic

locations within your favorite shopping mall. Plan on tuning in to a cable television traffic channel to view area road conditions in the comfort of your living room. All of these futuristic scenarios are possible through the use of high technology and are, indeed, part of the long-term benefits planned for New Jersey Turnpike travelers in the next few years.

Several dramatic and impressive improvements have either already been implemented or are in the planning stages as future projects. This booklet will detail the realities that exist today in Turnpike traffic management techniques along with the future innovations that promise to enhance safety and improve efficiency even more.

Currently on the New Jersey Turnpike--the nation's first smart highway in the northeast--staff personnel have embarked on a series of complex, high-tech solutions to a problem that has plagued highway professionals for years: traffic management. Leading the way for later toll roads, Turnpike techniques include embedded loop detectors that feed information to the computerized Automatic Traffic Surveillance and Control System (ATSCS), microwave radio communications, Closed Circuit Television (CCTV), visibility detectors, magnetometers, Electronic Toll Collection (ETC), and a unique dual/dual roadway design. All contribute to the Turnpike's ability to quickly monitor traffic, identify potential problems, route traffic around congestion and resolve problems.

Motorists who use the Turnpike can monitor traffic conditions themselves either by listening to the Highway Advisory Radio (HAR) on 1610 AM as they travel the highway, or by calling the newly implemented Highway Advisory Telephone (HAT) service before they leave their homes.

Each of the innovative technologies mentioned above will be explored in detail in the pages that follow. The New Jersey Turnpike Authority is pleased to offer "Today's Look Into Tomorrow's Turnpike."

Donald L. Watson
Executive Director

A MESSAGE FROM THE CHAIRMAN

While the New Jersey Turnpike Authority's fundamental mission is to operate the Turnpike safely and efficiently, it is also essential to continually look into the future. Innovative Turnpike projects designed for the 21st Century are being incorporated into our highway to not only assure, but also improve the continued vitality of our transportation network.

These dynamic programs, financed through toll revenue and bonds, will ensure the safest and most efficient transportation system possible.

It takes foresight and hard work to fulfill these challenging goals, but as Chairman, I have and will continue to devote my energies to see that these challenges are met.

David J. Goldberg

Chairman

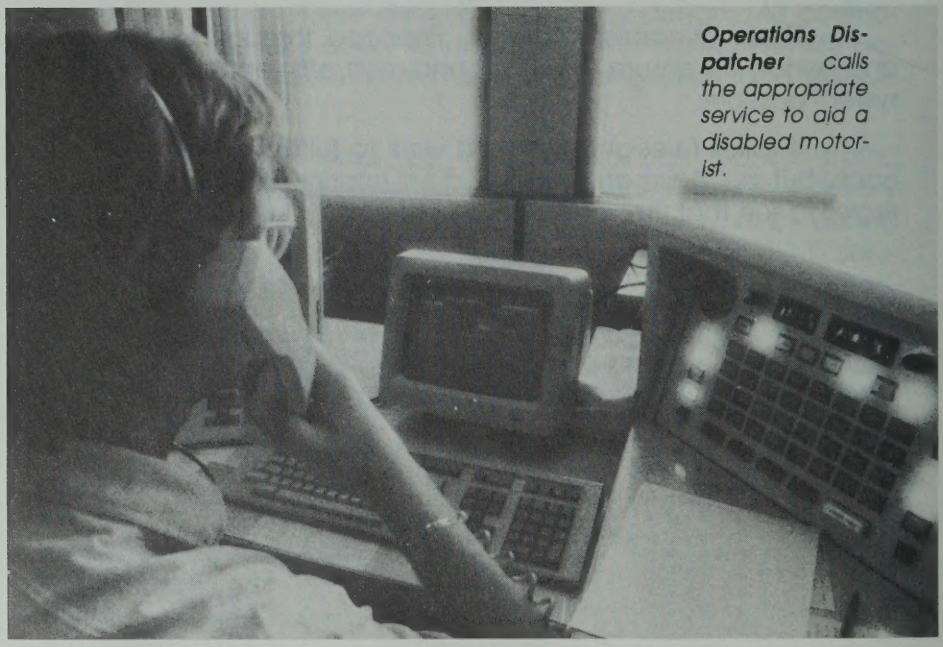
TRAFFIC OPERATIONS CENTER

In the new age of Traffic Management on the New Jersey Turnpike, there is one exciting component that serves as the nerve center for all the action. It is the Traffic Operations Center located inside the Administration Building just off Interchange 9 in East Brunswick. It combines the looks of a NASA Command Center with the action of a busy news center.

The Traffic Operations Center uses the latest in roadway detection technology, along with trained personnel, to oversee and communicate information necessary for the efficient and safe management of the Turnpike.

The staff at the Center can change speed limit signs with the push of a button, dispatch emergency vehicles for accidents, summon towing contractors for a disabled vehicle and interact with a host of Turnpike emergency personnel and State Police -- all within seconds.

The Traffic Operations Center is staffed 24 hours a day, 7 days a week with a total of 16 professionally trained individuals.



Operations Dispatcher *calls the appropriate service to aid a disabled motorist.*

***In the Traffic Operations Center**, Shift Supervisor monitors traffic on the Turnpike by means of computerized consoles and closed circuit television.*

The dispatchers view a detailed color map of the roadway, where information gathered by loop detectors embedded in the pavement is reproduced right at their desks on a continually updated computer terminal. They monitor conditions while maintaining constant communications with all Turnpike departments. They convey vital information on accidents, disabled vehicles, roadway and weather status to police and field personnel ensuring a smooth, quick response to any type of emergency.

For example, information received regarding a disabled vehicle on the roadway is dispatched to the appropriate road service unit. The dispatcher then tracks the response to the vehicle via computer ensuring that assistance is rendered. The computer also logs the incident along with the time and location for future reference.

The New Jersey Turnpike is the road of choice for over 184 million vehicles annually. This means that the Traffic Operations Center is constantly buzzing with activity as they coordinate the responses to an average of 230 disabled vehicles each day. In addition, the staff updates the changeable message signs and speed limit/speed warning signs that are seen along the roadway

and initiate response plans for spilled cargo and hazardous materials.

Current roadway information is shared with neighboring agencies, such as TRANSCOM, the Garden State Parkway, The Port Authority of New York and New Jersey, the Delaware River and Bay Authority, the Pennsylvania Turnpike, Shadow Traffic and Metro Traffic. This cooperative networking enables motorists to plan alternate routes of travel when problems exist, thereby providing a more efficient and safer trip.

The next few pages will highlight some of the advancements in technology that enable the Traffic Operations Center staff to perform their duties so well. Still, it is quite remarkable to realize that whether there is a noontime accident, or a peaceful roadway late at night, the Traffic Operations Center is hard at work ensuring every driver's safety with the best technology available.

AUTOMATIC TRAFFIC SURVEILLANCE AND CONTROL SYSTEM (ATSCS)

It is hard to imagine the sheer length of the New Jersey Turnpike. So often it is just seen as the most direct route from one place to another. However, it runs 147 miles from the northern tip of the State all the way to the Delaware Memorial Bridge. Over half a million vehicles use it on a daily basis. People going to work or school, truckers delivering goods, or families headed for vacations--it is a tremendous responsibility to keep them safe.

The Turnpike Authority has developed a unique computerized management tool known as the Automatic Traffic Surveillance and Control System (ATSCS) to help fulfill this responsibility. This system utilizes some 900 sensors, or detector loops as they are known, which are actually located beneath the road surface, to transmit vehicle data, which is translated as average speed or vehicle density to the Traffic Operations Center. Based on this type of information, changes to speed limit/speed warning signs can be made--automatically--thus alerting motorists to upcoming congestion or an accident scene.

Originally installed between Exit 9 in East Brunswick

***Aerial view** of the New Jersey Turnpike's Administration Building at Exit 9 in New Brunswick where the Traffic Operations Center is located.*

***Overhead changeable message signs** inform motorists of speed limit and road conditions ahead.*

and the Turnpike's northern terminus near Route 46 in Ridgefield, the ATSCS has been expanded south to Exit 8A in Cranbury. It extends over 45 miles with loop detectors in half-mile increments embedded in the roadway.

Loop detectors consist of a special conductive wire and their square-shaped outline can be seen just below the roadway surface. A magnetic field is created inside the boundaries of the loop detector. The magnetic field is disrupted when a vehicle drives over the loop. This disruption sends out a signal indicating the presence of a vehicle. The more signals the loop detectors send out, the more indication that congestion is building up in that area of the roadway. If a vehicle actually stopped in place on a loop detector for a period of time, many signals are sent from that detector indicating that the vehicle is not moving, which would signify to the Operations Center that there is some type of congestion.

The information from the loop detectors, such as volume, occupancy and speed, is gathered by a micro-processor and sent to the Traffic Operations Center by radio signals or buried cable. Congestion is quickly detected and the proper message signs are activated indicating this condition. Motorists can then choose alternate routes to avoid the congestion ahead. This greatly improves traffic flow and safety.

The true magic of the ATSCS is that it performs in real time without delay. In other words, the system reacts to conditions and produces an action immediately. The specific components that allow this are known as real-time traffic surveillance, real-time sign control and the real-time closed loop process.

Real-time traffic surveillance identifies important traffic information such as volume and occupancy, a measure of congestion, as well as determining speed and vehicle type (cars or trucks.)

With real-time sign control, the ATSCS utilizes the information received from the surveillance component and translates it into roadway messages for the motorist through descriptive signage. There are 65 changeable message signs which display roadway access and 127 other remotely-controlled signs on the Turnpike. These remotely-controlled signs include speed limit signs and warning signs which describe road conditions, i.e., snow, fog,

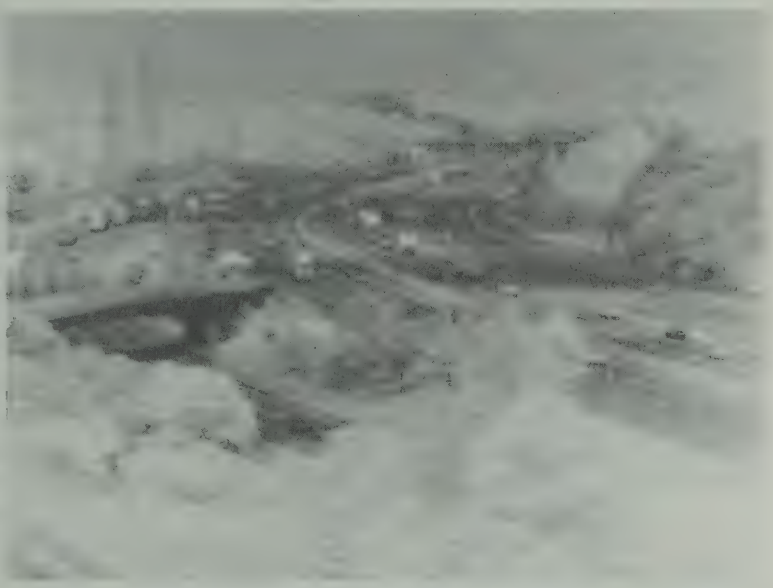
ice, construction, congestion or accident.

The real-time closed loop process takes data from the surveillance component, updates the traffic display and triggers the sign control component. This reduces overcapacity by diverting traffic from the inner roadway to the outer roadway, or vice versa, using changeable message signs to direct motorists. In addition, the changeable speed signs can reduce the speed limit postings in congested areas. All of this is accomplished in seconds or **real time.**

During our extensive widening program from Interchange 11 to Interchange 14 on the Turnpike, two interim methods -- video imaging and magnetometers -- are being utilized in this area.

DUAL-DUAL ROADWAY

Smart roadways are not only developed and maintained by using computers and technological advancements. There is still the need for aggressive and innovative roadway design and development as well.



The dual/dual roadway *on the New Jersey Turnpike extends from Interchange 8A in Cranbury to Interchange 14 in Newark after which it separates into an easterly and westerly alignment. The two alignments meet again in Bergen County where the road extends to the George Washington Bridge.*

The New Jersey Turnpike's original design has resulted in one of the safest and most efficient highways in the world. Between Interchange 8A and Interchange 14, the highway is comprised of four adjacent roadways--two in the northbound direction and two in the southbound direction. The "inner roadway" is normally reserved for cars, while the "outer roadway" is designated for use by trucks, buses and cars.

Under normal conditions, traffic separates and travels in its designated lanes. If a problem should occur on the inner roadway, however, traffic can be diverted to the outer roadway and vice versa. The diversion of traffic is accomplished using the changeable message signs, which are activated remotely via the ATSCS.

Service areas and interchanges or exits are accessible from both the inner and outer roadways.

VIDEO IMAGE DETECTORS

On today's high-tech highways, the use of video equipment to enhance safety is becoming a normal occurrence. The Turnpike Authority has managed to take the use of this equipment to a higher level of sophistication -- cameras that transmit data--not pictures--to our communications network.

These cameras are knows as Video Image Detectors (VID) and are placed 20 feet above the roadway from which vantage point they "watch" a specific area of the Turnpike. This area is the detection zone. Instead of video pictures, the camera uses video pattern recognition and identifies a vehicle by type as the vehicle passes through the camera's field. It is as if the camera projects an imaginary beam of light across these roadway lanes. Each time a vehicle crosses the beam, information about the vehicle, such as size and speed, is gathered and transmitted.

Similar to the missile guidance technology used by the U.S. Air Force to identify targets, these above-ground cameras "visualize" each vehicle's footprint and speed. A microprocessor interprets and analyzes the information and reports on volume,

occupancy, speed and vehicle type or classification. Multiple detection points covering several lanes can be defined with a single camera. The higher up the camera is placed, the larger area it can view.

MAGNETOMETERS

Another tool Turnpike personnel use for detection is Magnetometers. These cigar-shaped rods are particularly effective for use under bridge structures where they protrude from the structure and detect data about vehicles passing beneath the bridge overpass. They indicate the presence of a metallic object, such as a vehicle, by the disruption it causes in the magnetic field.

Magnetometers are also installed in the pavement surface. Unlike detector loops, however, they detect a point, rather than an area encompassed by the loop. The data can be processed to provide volume and occupancy measurements, as well as speed and length, when installed in paired configuration.

CLOSED CIRCUIT TELEVISION

The age of video and its infinite dimensions continue to fuel the high-tech world with amazing new uses and products. The Turnpike Authority's Traffic Operations Center is also an active participant in this area of technology. Presently, Closed Circuit Television (CCTV) on the roadway is used in conjunction with the detection devices of the ATSCS.

Two remotely controlled video cameras are part of the interim ATSCS. These cameras monitor the elevated section of the roadway in Elizabeth. Shortly, a third camera will be placed at Interchange 16W to monitor traffic at the Meadowlands Sports Complex, particularly during peak travel times and when sporting events are scheduled.

The primary purpose of CCTV is not to confirm congestion or incidents, but rather to identify the cause of the congestion. This helps the Operations Center personnel determine the appropriate action in a shorter period of time. The CCTV literally

Dual Closed Circuit Television screens *in the Traffic Operations Center visualize area of frequent roadway delays in Elizabeth where Turnpike widening is taking place.*

gives our Operations staff a set of "eyes" on the roadway. They can see what is happening 20 miles away on the roadway from the Control Center on the CCTV screen. The current and future potential for this technology from a safety standpoint is limitless.

VARIABLE MESSAGE SIGNS

As we near the year 2000, information is still the best way to make the Turnpike a safe and advanced roadway. To augment the high-tech devices mentioned previously, a priority has also been placed on giving the individual driver on the Turnpike accurate and updated information right outside his vehicle. This is achieved with Variable Message Signs (VMS.)

***Motorists** are reminded to tune into the Highway Advisory Radio station by variable message signs.*

This particular signage system acts in addition to the speed warning signs that warn of delays or construction ahead on the Turnpike. However, Variable Message Signs will have a greater capacity for different types of messages than the usual "Speed Warning/Speed Limit" signs. This enables the Variable Message Sign to relay specific details to motorists on individual road situations. For example, if there was a serious accident on a local road just off a Turnpike interchange--the variable message sign would flash this information to motorists traveling the Turnpike near that interchange--informing motorists of upcoming congestion in the event they planned to exit at that interchange, as well as identify an alternate route. The messages will be created and controlled by Operations personnel similar to the way information is typed into a computer. The signs themselves will generally be located overhead in locations along the Turnpike where they will have the greatest impact on travelers who will be using, not only the Turnpike, but other nearby roads as well.

Most importantly, the signs make the motorist more knowledgeable as they travel, possibly lessening the negative impact incidents can have on travel plans. They are alerted to roadway closures, alternate routing and other interruptions to normal traffic flow on the Turnpike and other roads in the region.

WEATHER STATIONS

Fog can turn a high-speed roadway into a blur of red brake lights, screeching tires and edgy drivers. In a matter of seconds, it can also lead to accidents and even death.

The development and financing of high-tech equipment can be difficult. However, when it is used to save lives, the real value of advanced technology cannot be calculated. Weather Stations give the Turnpike Authority another ally in the battle with nature's elements. These devices, which the Authority is in the process of acquiring, will provide the ATSCS with up-to-the-minute information on fog, humidity, wind velocity, wind direction and visibility.

Weather detection equipment consists of three separate devices that help the Authority detect changes in weather conditions. The three specific conditions that are monitored are ice, fog and atmospheric changes, such as wind direction.

As mentioned earlier, ice on the Turnpike is very dangerous, especially because of the speeds vehicles travel on the roadway. An ice detector actually looks like a hockey puck and is about six inches in diameter. It is fitted into the road's surface and measures the pavement temperature. If the temperature dips below freezing and ice is detected, this information is transmitted to the Operations Center so that safety actions, such as speed limit reduction signs and warning lights, can be initiated.

Fog detection equipment measures the density of the air as it passes through the sensors located at the top of the unit. As the air passes through the visibility sensors, fog density can be determined. The information is then transmitted via computer to the Operations Center for response, just like the ice detection data. Fog detectors will be set up adjacent to certain areas where fog has historically been a problem for Turnpike drivers.

The ATSCS will process the information from the ice

Overhead changeable message signs *inform motorists of speed limit and road conditions ahead.*

Weather Stations, *which detect and classify fog, humidity and ice, relay information through the Automatic Traffic Surveillance and Control System so that motorists are alerted and proper precautions taken.*

and fog detectors and activate the ice and fog warning lights. In addition, the speed limit will be reduced not only at the location of the ice and fog, but also for traffic approaching the fog or ice condition. With early warning, traffic is reduced to a safe speed before it approaches the roadway hazard.

In addition, atmospheric conditions, such as barometric readings, wind direction and velocity, can also be measured and interpreted by a Weather Station. The Weather Station looks like a light stanchion and stands approximately 15 feet high. It has various instruments attached to it that measure atmospheric conditions, including snow.

The information from the weather station and roadway ice detectors will also be transmitted to the Maintenance Department. This information will be used to more effectively manage plowing and salting operations during icing conditions or a snowstorm.

Two of the fog detectors have already been purchased by the Authority for testing. One will be placed in East Brunswick where the equipment will be tested by Turnpike specialists. The second is scheduled to be used near Newark Airport where visibility is crucial to the area.

The significance of this technology to safety cannot be emphasized too strongly, since fog has been a vicious enemy of highway drivers for decades. More detectors will be purchased if the effectiveness of these units is proven.

LAW ENFORCEMENT COMMUNICATIONS/PATROL CENTER

An integral part of our high-tech strategy is upgrading our enforcement capabilities. In order to maintain our strict safety standards, the State Police, who patrol the roadway, must be given the best that today's technology can offer. These troopers are our front line and it is essential to our safety goals that they have information access second to none.

The Law Enforcement Communications/Patrol Center *in Cranbury will be the new command post for State Police, Troop D, who patrol the Turnpike. The main building (center) will house the Communications/Patrol Center. A helipad is located to the far right and a facility to maintain State Police vehicles and communications equipment completes the complex (to the left of the Command Center.)*

With that premise in mind, the Authority has developed a bold program of innovation for the State Police who patrol the Turnpike, which includes a brand new command post and patrol cars equipped with 21st century technology.

The new command post, known as the Law Enforcement Communications/Patrol Center, will be state-of-the-art and will serve as the headquarters for New Jersey State Police Troop "D," who patrol the New Jersey Turnpike. It will be located just south of the Molly Pitcher Service Area in Cranbury Township. This $12.5 million facility will be the first of its kind in the country, containing the most up-to-date communications equipment and centralized dispatching capabilities for the State Police. It will consist of two buildings and encompass 34,000 square feet. In the event of a statewide emergency, this facility can also be used as the State Police "Command" Center.

The Center will enable troopers and Operations personnel to gather all kinds of information about the roadway through various Intelligent Vehicle Highway Systems (IVHS) and put this data right into each trooper's vehicle via Mobile Data Terminals (MDT) located in the trooper's car. MDTs will be placed in each of the 145 State Police cars. With this technology, a trooper traveling on the Turnpike can inquire about road conditions, congestion and accidents just by pressing a few keys on his computer. This will decrease response time to incidents and has the potential to save lives.

MOBILE DATA TERMINALS

Traffic congestion information from the Turnpike's current Automatic Traffic Surveillance System would be displayed at the new facility and telemetered, on demand, to individual State Police patrol cars equipped with Mobile Data Terminals (MDT.) In the future, the system would actually produce a graphic of the Turnpike on the screen in the trooper's vehicle. This graphic will pinpoint the location of an accident or congestion, leading to quicker police responses. Similarly, with the push of a button, the system will be capable of automatically calling up the appropriate fire or first aid squad to respond to an accident.

Mobile Data Terminals *will be placed in all Turnpike State Police patrol vehicles providing important vehicle and motorist information to Troopers within seconds. The terminals will also specify the appropriate action for a host of hazardous material incidents.*

The Mobile Data Terminal in the patrol cars will also enable troopers to input basic information into the computer concerning disabled vehicles encountered on the roadway. The Computer Dispatch System automatically dials the appropriate wrecker or service unit to dispatch assistance. This will have a dramatic effect on response time for these incidents. In the foreseeable future these functions may be performed by a voice-activated system, so the trooper can concentrate on driving and simply tell the terminal the necessary information.

The Mobile Data Terminal will also be linked through the new Communications Center to the Division of Motor Vehicles, the National and State Crime Information Centers and Hazardous Material data responses. This will enable the trooper to access the driving or criminal history of motorists encountered on the Turnpike and also indicate to the trooper the proper procedure to follow in the event of a hazardous material incident.

The technology that this Center provides puts New Jersey on the cutting edge of traffic management and represents another step towards a smarter and safer roadway.

In addition, Automatic Vehicle Locators (AVL) will be placed in patrol cars so that the Patrol Center, as well as troopers on the road, can identify the exact location of each unit at any give time. This feature will automatically identify the patrol vehicle location to ensure assistance with a minimum of delay. AVLs will also be used to call upon the appropriate fire or first aid squad, thus resulting in quicker responds times for emergencies and the clearing of disabled vehicles.

As a further enhancement, data from the Turnpike's computerized toll system and future Electronic Toll and Traffic Management (ETTM) system would be displayed at this new facility and communicated to mobile units.

The State Police will also monitor Turnpike Highway Advisory Radio sites so that they will know the status of the roadway outside their patrol area.

ELECTRONIC TOLL COLLECTION

In the not-too-distant future, it will be possible to drive through many of the major highways and bridges in the northeast without stopping to pay any tolls. This will be accomplished by means of a system of Electronic Toll Collection named E-ZPass.

Seven regional transportation agencies are participating in a joint project that will allow vehicles to pass through toll booths that pick up radio signals from tiny electronic fare cards attached to the windshields, deduct the toll from the driver's prepaid account and send the driver a monthly statement.

The other agencies involved in this project besides the New Jersey Turnpike Authority are the Atlantic City Expressway, the New Jersey Highway Authority (Garden State Parkway), the New York State Thruway Authority, the Pennsylvania Turnpike Commission, the Port Authority of New York and New Jersey and the Triborough Bridge and Tunnel Authority.

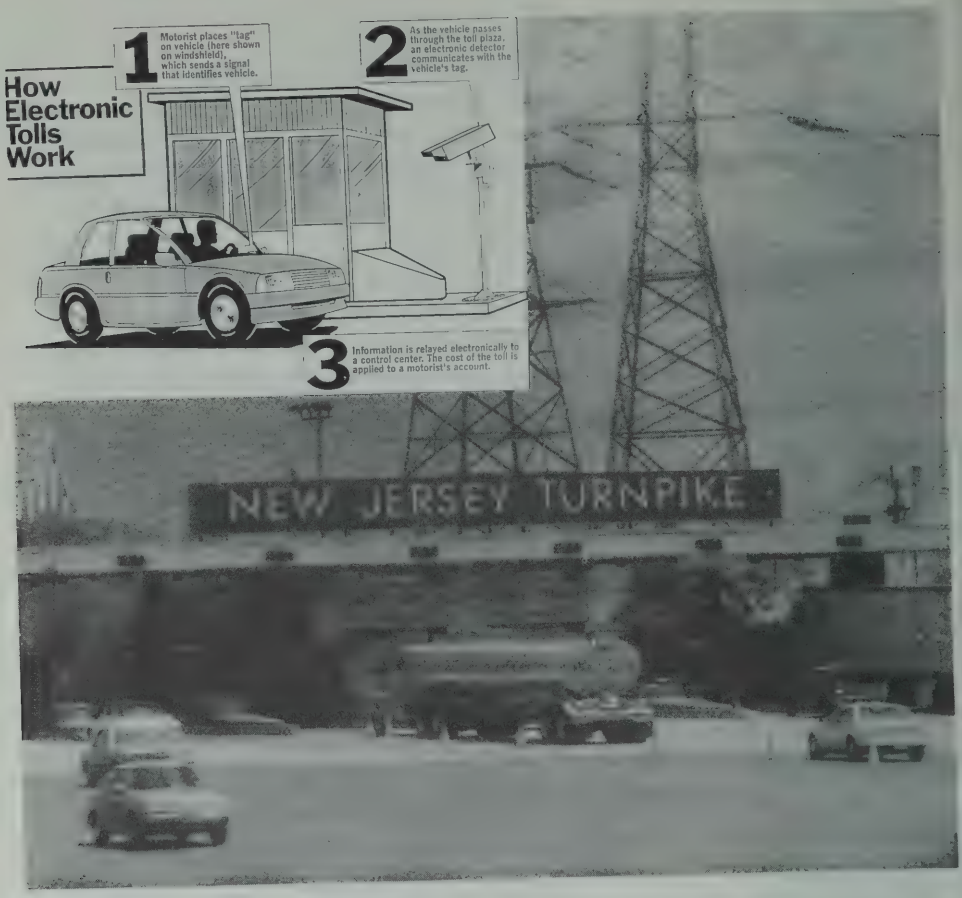
These tri-state toll authorities are joined together through a group known as the E-ZPass Interagency Group. By working together, the agencies can offer maximum convenience for their patrons. The committee is continually evaluating and testing tag and reader equipment for a one-tag system.

This system is expected to reduce congestion considerably at toll crossings because, according to transportation officials, up to twice as many cars will be able to drive through a toll lane. E-ZPass offers convenience. It will permit motorists to use the same tag at many different bridges, tunnels and highways in this region. Not only will E-ZPass decrease congestion and reduce delays at toll booths, but it will also improve air quality and reduce fuel consumption, important goals of the Federal Clean Air Act.

On The N.J. Turnpike

Four lanes at Interchange 17 in Secaucus will be equipped with electronic toll collection in Phase I of the Turnpike implementation of E-ZPass. Vehicles will be required to stop at either staffed or automatic lanes. No lanes will be dedicated solely to E-ZPass during this initial period.

Once the system becomes popular and is found to run efficiently, E-ZPass equipment will be installed at all Turnpike toll plazas.


How Electronic Tolls Work
1
Motorist places "tag" on vehicle (here shown on windshield), which sends a signal that identifies vehicle.
2
As the vehicle passes through the toll plaza, an electronic detector communicates with the vehicle's tag.
3
Information is relayed electronically to a control center. The cost of the toll is applied to a motorist's account.
NEW JERSEY TURNPIKE

Before long. *Electronic Toll Collection will be implemented in existing Turnpike toll lanes.*

HIGHWAY ADVISORY RADIO SYSTEM

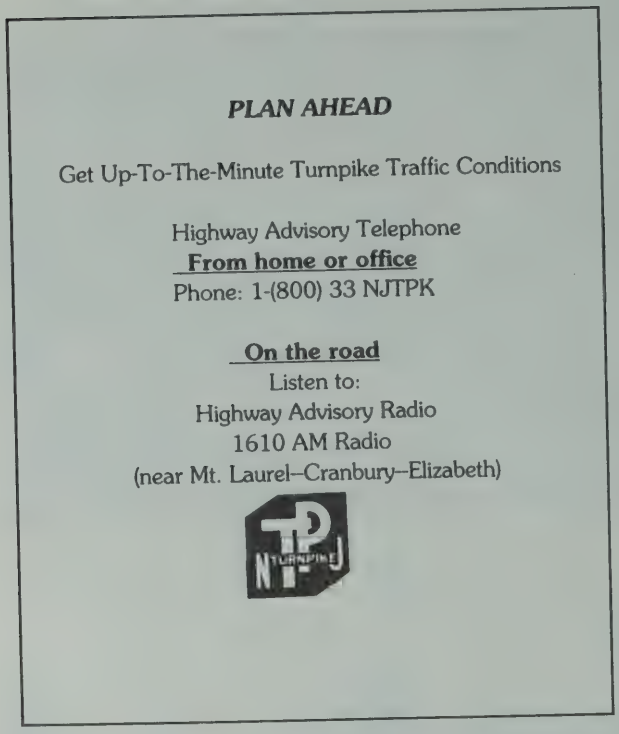
A constantly updated Highway Advisory Radio System (HAR) broadcasts traffic information collected by the ATSCS and from other sources. Motorists can tune to radio station 1610 AM at three locations: Mt. Laurel in the southern sector, Cranbury in the central sector and Elizabeth in the northern sector. This allows them to make informed decisions concerning travel routes and helps the Turnpike to decrease the number of vehicles traveling into a congested area. A trailer-mounted radio unit can be transported into areas with major backups which are out of range of the existing three locations.

Posted roadway signs advise motorists when they are entering one of the broadcast areas. Flashing lights on the signs alert drivers to tune into 1610 AM for urgent messages. In addition it relays information about neighboring transportation roads, tunnels and bridges regarding delays that may affect motorists after

Posted roadway signs *advise motorists when they are entering one of the Highway Advisory Radio broadcast areas. Urgent messages are indicated by flashing lights on the signs.*

they leave the Turnpike. During normal traffic conditions, this station also broadcasts safety messages and directions to public attractions such as the State Aquarium, Liberty State Park, Liberty Science Center, the Statue of Liberty and the Sports Complex.

The current system, established in July 1992, does not reach all sections of the roadway at this time. However, the Authority is expanding its capacity and anticipates an all-encompassing station by early 1994.

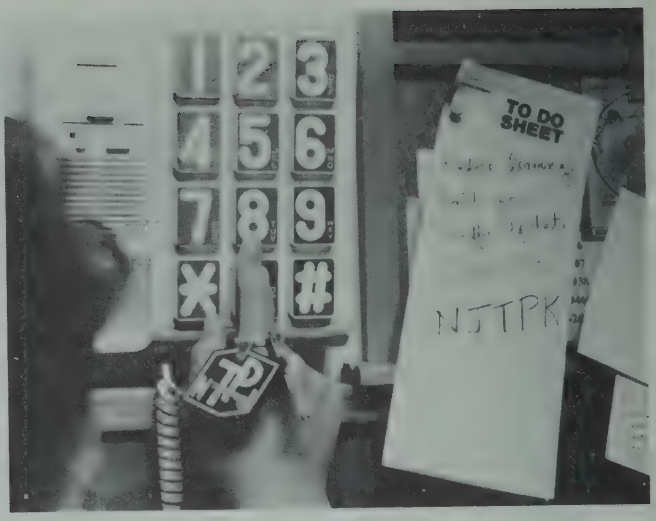


Palm Cards *were distributed to motorists informing them of new Turnpike radio station and new toll-free telephone number.*

HIGHWAY ADVISORY TELEPHONE SYSTEM

As part of our on-going commitment to provide service to our patrons, the Authority has implemented an 800 number which motorists can call before they leave their homes to get information on up-to-the-minute traffic conditions, construction activities and weather conditions on the Turnpike. By calling 1-800-33-NJTPK or 1-800-336-5875, motorists can select from a menu of southern, central or northern roadway sections, depending on

Transmitting site *for the Highway Advisory Radio solar panels charge batteries which provide backup for the Turnpike's Highway Advisory Radio System.*



Recently established, *the toll-free Highway Advisory Telephone became an instant success allowing motorists to call ahead, before they leave their home or office.*

their travel plans, by depressing the 1, 2 or 3 digit on a touch tone telephone.

Updated three times daily, during normal conditions, the Highway Advisory Telephone System contains current conditions on the Turnpike. Any unusual occurrence or incident is immediately included, regardless of the time of day or night. Each message is day, date and time-stamped so motorists know that the information they are hearing is the most up-to-date data available.

The Highway Advisory Telephone system is designed to complement the Highway Advisory Radio System. New Jersey Turnpike motorists now have access to up-to-date traffic conditions both before they start their trip on the Turnpike and after they enter the roadway.

New Jersey Turnpike Authority

Jim Florio, *Governor*

David J. Goldberg, *Chairman*

Frank E. Rodgers, *Vice Chairman*

Leonard Cohen, *Treasurer*

Clay Constantinou, *Commissioner*

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